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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,831	03/25/2004	Yoshio Kimoto	TIC-0061	6699
23377 7590 02/21/2007 WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER BERTHEAUD, PETER JOHN	
			ART UNIT	PAPER NUMBER
			3746	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/21/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/808,831

Applicant(s)

KIMOTO ET AL.

Examiner

Peter J. Bertheaud

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152:

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/30/2004, 8/30/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 9, 11, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokomachi 6,227,814 in view of Morlon 3,731,499.

2. Yokomachi discloses a reciprocating refrigerant compressor comprising a cylinder block 10 having a plurality of cylinder bores 10a, wherein the cylinder block has two end faces at which the cylinder bores open; a front housing member 11, which is secured to one of the end faces of the cylinder block; a rear housing member 13, which is secured to the other one of the end faces of the cylinder block with a valve plate 12 in between; a through bolt for fastening the cylinder block, the rear housing member, and the front housing (see Fig. 1); a plurality of pistons 16, each of which is accommodated and reciprocates in one of the cylinder bores; a drive shaft 15 for driving the pistons, wherein the drive shaft is rotatably supported by the cylinder block 10, wherein reciprocation of the pistons compress and discharge refrigerant gas; and a gasket 45 located between the cylinder block and the valve plate (see Fig. 2), wherein the gasket has a center hole and a plurality of bore holes 45a, each bore hole being aligned with one of the cylinder bores. Yokomachi further discloses that the cylinder bores are

Art Unit: 3746

provided about an axis of the cylinder block at equal angular intervals (see positions of 45a in Fig. 3).

Morlon (Fig. 1) teaches a flexible coupling or gasket comprising a center hole 2 and a plurality of bore holes 9. Morlon further teaches that a first through hole 10 is formed in the gasket to reduce bending moment when the through bolt is fastened (see col. 3, lines 21-25), wherein the first through hole is located between an adjacent pair of the bore holes and in an imaginary circle (the radius of which extends to the end of hole 10), the center of the imaginary circle coinciding with the center of the bore hole and the radius of the imaginary circle being a first radius, and wherein the first radius is the distance from the center of the gasket to the center of one of the bore holes (9). Morlon further teaches that the imaginary circle is a first imaginary circle, wherein a second imaginary circle having a second radius (designated by R in Fig. 1) is assumed to exist about the center of the gasket, the second radius being greater than the first radius by a predetermined value, wherein a second through hole 3 is formed in the gasket, and wherein the second through hole is located in a portion of the gasket between the second imaginary circle and the first imaginary circle (see Fig. 1). In reference to claims 4, 5, 14, and 15; while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function, because apparatus claims cover what a device is, not what a device does (Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990)). Thus, if a prior art structure is capable

Art Unit: 3746

of performing the intended use as recited in the preamble, or elsewhere in a claim, then it meets the claim, as has been shown above to be the instant case.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compressor of Yokomachi, by implementing first and second through holes in the gasket, in order to increase flexibility and reduce the localizations of fatigue on the gasket (Morlon, col. 3, lines 21-25).

3. Claims 3, 6, 7, 10, 13, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokomachi 6,227,814 in view of Morlon 3,731,499, and in further view of Hartz 3,985,000.

Yokomachi in view of Morlon discloses the invention as discussed above. However, Yokomachi in view of Morlon does not teach the following claimed limitations taught by Hartz.

Hartz (Fig. 3) teaches an elastic joint component comprising bore holes (see tear drop shaped holes), mounting holes 3, a center hole (hole that extends in a circle from what would be the center of Fig. 3, with a radius ending at rounded edge of 4), a first through hole (formed by the edge of the center hole and ending where a gap between two 4 elements narrows) and a second through hole (formed by a circle in the curved end of the gap between two 4 elements). Hartz further teaches that the first through hole communicates with the second through hole, and that the first through hole communicates with the center hole (see Fig. 3). Hartz further teaches that the first through hole is of a plurality of first through holes, the second through hole is one of a plurality of second through holes, the first through holes are provided about the center

Art Unit: 3746

of the gasket at equal angular intervals (see Fig. 3), and that each second through hole forms a pair with one of the first through holes (see Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compressor of Yokomachi in view of Morlon, by making the through holes in the gasket communicate with one another in order to give the gasket greater flexibility (Hartz, col. 2, lines 1-4).

4. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokomachi 6,227,814 in view of Morlon 3,731,499, and in further view of Kimura 5,556,261.

Yokomachi in view of Morlon discloses the invention as discussed above. However, Yokomachi in view of Morlon does not teach the following claimed limitations taught by Kimura.

Kimura (Fig. 6) teaches a compressor comprising a cylinder block 1 having a plurality of cylinder bores 11 and a plurality of pistons 12. Hibino further discloses that a compression chamber 13 is defined in each cylinder bore 11 by the corresponding piston 12, wherein the compressor further comprising a suction pressure zone 44, the internal pressure of which is a suction pressure, and a rotary valve 42 that rotates as the drive shaft 21 rotates, and wherein the rotary valve has an introducing passage 45 for successively introducing gas from the suction pressure zone to the compression chambers 13 as the drive shaft rotates.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compressor of Yokomachi in view of

Art Unit: 3746

Morlon, by implementing a rotary valve having a suction chamber and a passage in order to introduce gas to the compression chambers (Kimura, col. 5, lines 21-64).

### ***Conclusion***


5. The prior art made of record, noted in the attached form 892, and not relied upon is considered pertinent to applicant's disclosure.

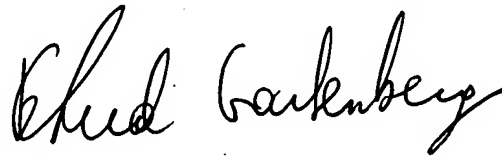
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Bertheaud whose telephone number is (571) 272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
PJB  
2/15/07

  
EHUD GARTENBERG  
SUPERVISORY PATENT EXAMINER